

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P519234

Luminaire Tested: **SQ4-WB-075U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519234  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-075U-100D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

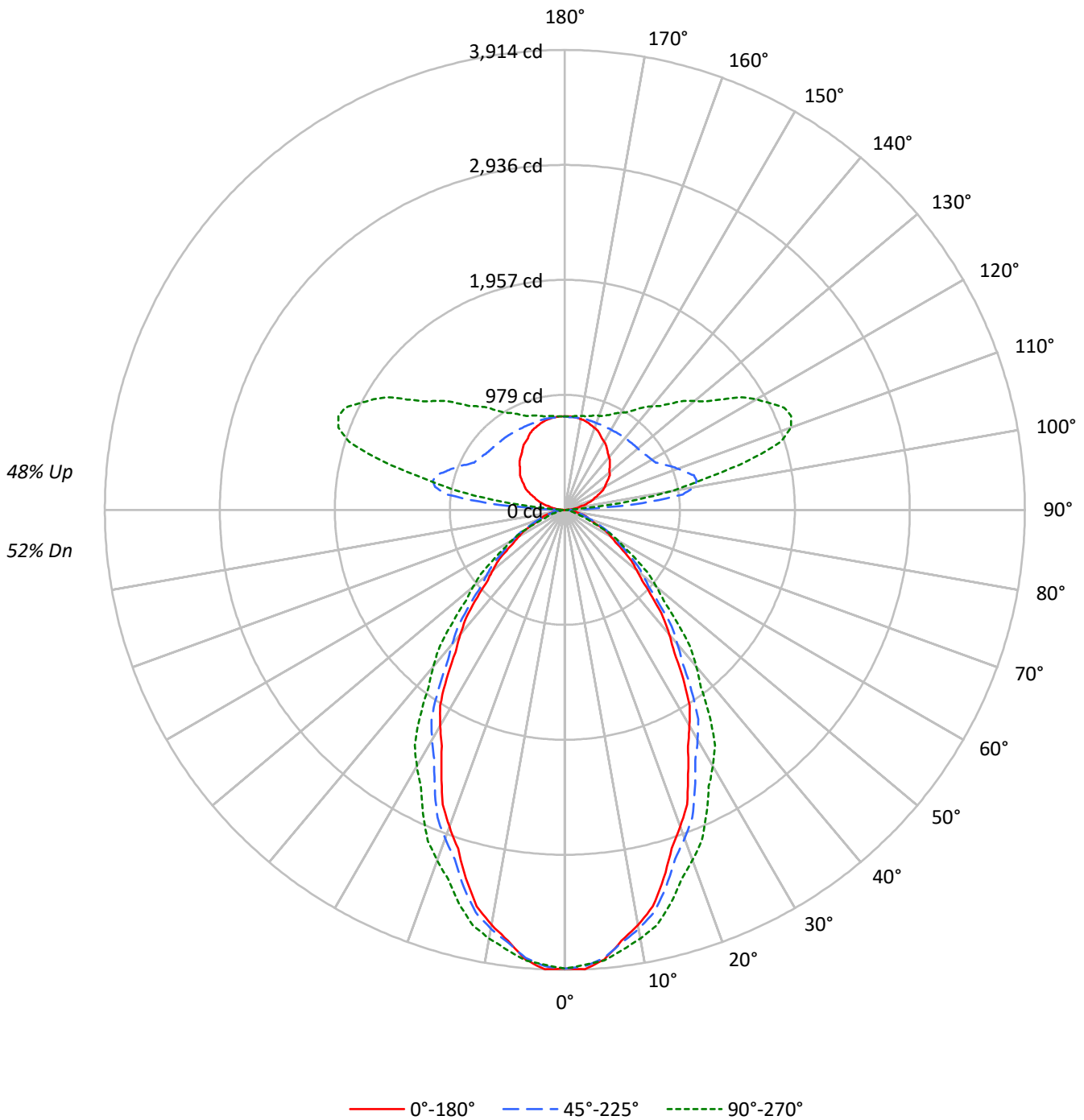
Lumens per Lamp: N/A  
Luminaire Lumens: 10867.1 lumens  
Efficiency: N/A  
Efficacy: 100.3 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 108.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52
1	99	96	92	89	92	89	86	83	76	74	72	64	63	61	53	52	52	46
2	92	85	79	75	85	79	74	70	68	65	62	58	55	53	48	47	45	41
3	84	76	69	64	78	71	65	60	61	57	53	52	49	47	44	42	40	36
4	78	68	61	55	72	64	57	52	55	50	47	48	44	41	40	38	36	32
5	72	61	54	48	67	57	51	46	50	45	41	43	40	37	37	34	32	29
6	67	56	48	43	62	52	45	41	46	41	37	40	36	33	34	31	29	26
7	62	51	43	38	58	48	41	36	42	37	33	37	33	30	32	29	26	24
8	58	46	39	34	54	44	37	33	39	33	30	34	30	27	29	26	24	22
9	54	43	36	31	51	40	34	30	36	31	27	31	27	24	27	24	22	20
10	51	39	33	28	47	37	31	27	33	28	25	29	25	22	26	23	20	18

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	18010	18010	18010
5°	17785	17722	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14616	15583
25°	12634	13324	14518
30°	11297	12036	13414
35°	9879	10592	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5729	6245	7290
55°	4863	5360	6021
60°	4156	4646	4805
65°	3310	3908	3104
70°	2935	3050	1895
75°	2718	2474	1160
80°	2502	2277	1002
85°	2265	2085	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	358.1	3.3
10°-20°	931.4	8.6
20°-30°	1206.5	11.1
30°-40°	1181.4	10.9
40°-50°	904.3	8.3
50°-60°	602.6	5.5
60°-70°	328.8	3.0
70°-80°	137.0	1.3
80°-90°	40.8	0.4
90°-100°	374.7	3.4
100°-110°	1031.0	9.5
110°-120°	1064.2	9.8
120°-130°	852.6	7.8
130°-140°	669.7	6.2
140°-150°	513.2	4.7
150°-160°	369.0	3.4
160°-170°	225.6	2.1
170°-180°	76.1	0.7
0°-30°	2496.0	23.0
0°-40°	3677.4	33.8
0°-60°	5184.3	47.7
0°-90°	5691.0	52.4
90°-120°	2470.0	22.7
90°-150°	4505.5	41.5
90°-180°	5176.0	47.6
0°-180°	10867.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3904	3904	3904	3904	3904	
5°	3841	3802	3827	3836	3849	357
15°	3248	3236	3323	3414	3472	907
25°	2482	2489	2618	2732	2852	1142
35°	1754	1763	1881	2008	2150	1091
45°	1052	1072	1143	1229	1341	820
55°	605	630	666	692	749	548
65°	303	328	358	313	284	315
75°	152	152	139	95	65	163
85°	43	43	39	26	15	47
90°	2	7	12	15	15	6
95°	56	205	663	283	181	59
105°	184	283	1136	1730	1614	194
115°	326	397	911	1814	2059	322
125°	450	512	827	1398	1638	401
135°	543	602	803	1131	1280	419
145°	627	670	791	964	1038	393
155°	710	733	786	866	891	326
165°	768	777	790	822	827	216
175°	794	796	791	801	800	75
180°	794	794	794	794	794	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	<b>3904.1</b>	3904.1	3904.1	3904.1	3904.1
2.5°	<b>3913.7</b>	<b>3878.8</b>	<b>3887.6</b>	<b>3887.4</b>	<b>3876.7</b>
5°	<b>3840.7</b>	3802.2	3827.0	3835.9	3849.3
7.5°	<b>3698.2</b>	3669.0	3714.3	3747.8	3774.9
10°	<b>3587.2</b>	3562.0	3619.7	3668.5	3703.6
12.5°	<b>3458.3</b>	3437.2	3508.7	3574.2	3620.1
15°	<b>3248.0</b>	3236.2	3323.3	3413.8	3472.4
17.5°	<b>3022.9</b>	3017.2	3117.1	3222.6	3297.7
20°	<b>2869.4</b>	2867.7	2977.3	3087.2	3174.3
22.5°	<b>2714.5</b>	2718.2	2833.4	2947.7	3046.9
25°	<b>2482.2</b>	2488.9	2617.6	2731.7	2852.3
27.5°	<b>2267.4</b>	2270.4	2403.4	2523.9	2652.5
30°	<b>2120.8</b>	2129.2	2259.5	2384.2	2518.2
32.5°	<b>1974.1</b>	1983.9	2111.5	2240.4	2377.1
35°	<b>1754.2</b>	1762.6	1880.9	2007.5	2149.9
37.5°	<b>1527.4</b>	1538.8	1643.9	1763.5	1903.6
40°	<b>1380.7</b>	1397.5	1490.4	1603.1	1740.5
42.5°	<b>1239.6</b>	1260.3	1346.5	1453.4	1577.4
45°	<b>1051.8</b>	1071.9	1142.6	1229.1	1341.3
47.5°	<b>890.1</b>	913.2	967.5	1042.0	1137.8
50°	<b>798.3</b>	820.1	870.2	925.4	1015.8
52.5°	<b>717.4</b>	739.2	783.9	826.4	903.5
55°	<b>604.7</b>	629.8	666.4	691.7	748.6
57.5°	<b>512.2</b>	536.3	565.3	576.7	611.2
60°	<b>450.5</b>	477.3	503.6	502.3	520.8
62.5°	<b>394.3</b>	417.1	443.3	425.2	426.2
65°	<b>303.2</b>	328.3	358.0	312.8	284.4
67.5°	<b>245.0</b>	250.3	280.9	218.2	184.3
70°	<b>217.6</b>	217.6	226.1	168.9	140.5
72.5°	<b>191.5</b>	191.5	183.6	137.4	107.6
75°	<b>152.5</b>	152.5	138.8	95.2	65.1
77.5°	<b>117.5</b>	116.2	106.2	71.1	47.3
80°	<b>94.2</b>	94.2	85.7	56.1	37.7
82.5°	<b>73.7</b>	73.7	66.5	43.8	28.1
85°	<b>42.8</b>	42.8	39.4	25.5	15.4
87.5°	<b>15.4</b>	16.4	16.1	11.2	9.9
90°	<b>1.7</b>	6.6	11.8	15.2	15.2
92.5°	<b>23.3</b>	99.7	172.8	66.3	54.4
95°	<b>55.8</b>	204.6	662.7	283.4	180.9
97.5°	<b>90.9</b>	226.8	1011.3	779.2	549.8
100°	<b>116.6</b>	240.6	1120.8	1131.3	923.0
102.5°	<b>141.0</b>	257.0	1149.2	1403.5	1212.4
105°	<b>184.3</b>	283.4	1136.0	1730.2	1614.4
107.5°	<b>225.5</b>	316.1	1071.5	1890.1	1924.5
110°	<b>255.3</b>	337.9	1022.8	1929.9	2048.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	282.3	362.3	974.1	1904.3	2085.4
115°	326.3	397.3	911.2	1814.4	2059.1
117.5°	368.2	433.7	871.3	1688.4	1965.1
120°	393.9	456.7	853.7	1593.9	1879.9
122.5°	416.9	479.7	841.5	1511.1	1782.5
125°	449.7	512.5	826.7	1398.4	1638.1
127.5°	480.8	540.6	816.9	1304.4	1514.7
130°	497.0	558.2	811.4	1248.6	1440.3
132.5°	515.9	577.1	807.4	1199.5	1372.7
135°	542.7	602.2	803.0	1131.0	1279.7
137.5°	567.7	622.9	799.3	1075.6	1198.2
140°	586.6	637.9	797.9	1038.8	1149.6
142.5°	602.8	650.1	795.2	1006.0	1100.9
145°	627.2	670.2	791.2	963.6	1038.0
147.5°	653.2	690.2	789.1	926.1	985.6
150°	669.4	702.5	787.8	905.5	951.8
152.5°	684.3	714.7	786.4	887.7	926.1
155°	710.0	733.2	786.1	866.1	890.9
157.5°	728.6	747.5	786.1	848.4	865.5
160°	742.1	757.0	786.1	838.8	852.0
162.5°	753.0	765.2	787.4	830.6	841.2
165°	767.5	777.4	789.5	821.7	826.7
167.5°	777.6	785.2	791.2	814.2	815.5
170°	784.4	789.4	791.2	811.4	811.4
172.5°	789.8	792.1	791.2	807.4	806.0
175°	794.5	796.2	791.2	801.3	799.6
177.5°	795.9	795.9	790.5	798.5	795.9
180°	794.5	794.5	794.5	794.5	794.5

(END OF REPORT)